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Passive transfer of immunoglobulin Y antibody to Streptococcus mutans gluca	•									
binding protein B can confer protection against experimental dental caries. Infect Immun. 2001 May;69(5):3135-42. PMID: 11292733 [PubMed - indexed for MEDLINE]	binding protein B can confer protection against experimental dental caries. Infect Immun. 2001 May;69(5):3135-42.									
PubMed	, Links									
Services Oral administration of avian tumor necrosis factor antibodies effectively treats										
experimental colitis in rats. Dig Dis Sci. 2000 Dec;45(12):2298-305.										
PMID: 11258548 [PubMed - indexed for MEDLINE]										
3: Bochner BS, Bickel CA, Taylor ML, MacGlashan DW Jr, Gray PW, Raport CJ, Godiska R.	, Links									
Macrophage-derived chemokine induces human eosinophil chemotaxis in a Co	C									
chemokine receptor 3- and CC chemokine receptor 4-independent manner.  J Allergy Clin Immunol. 1999 Mar;103(3 Pt 1):527-32.										
Related PMID: 10069890 [PubMed - indexed for MEDLINE]										
Schweickart VL, Epp A, Smith A, Stine JT, Walton K, Tjoelker L,	Related Articles, Links									
Godiska R, Gray PW.  Profile of human macrophage transcripts: insights into macrophage biology an	d									
identification of novel chemokines.										
J Leukoc Biol. 1998 Jul;64(1):49-54. Review. PMID: 9665274 [PubMed - indexed for MEDLINE]										
5: Imai T. Chantry D, Raport CJ, Wood CL, Nishimura M, Godiska R, Yoshie O, Gray PW.	, Links									
Macrophage-derived chemokine is a functional ligand for the CC chemokine										
receptor 4.  J Biol Chem. 1998 Jan 16;273(3):1764-8.										
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Godiska R, Chantry D, Raport CJ, Sozzani S, Allavena P, Leviten D, Mantovani A, Gray PW.  Related Articles	, Links									
Human macrophage-derived chemokine (MDC), a novel chemoattractant for										
monocytes, monocyte-derived dendritic cells, and natural killer cells.  J Exp Med. 1997 May 5;185(9):1595-604.										
PMID: 9151897 [PubMed - indexed for MEDLINE]										

<u> </u>	Hromas R, Gray PW, Chantry D, Godiska R, Krathwohl M, Fife K, Bell GI, Takeda J, Aronica S, Gordon M, Cooper S, Broxmeyer HE, Klemsz MJ.	Related Articles, Links
	Cloning and characterization of exodus, a novel beta-chemokin Blood. 1997 May 1;89(9):3315-22. PMID: 9129037 [PubMed - indexed for MEDLINE]	ne.
<b>3</b> 8	Godiska R, Chantry D, Raport CJ, Schweickart VL, Trong HL, Gray PW. Monocyte chemotactic protein-4: tissue-specific expression and CC chemokine receptor-2.  J Leukoc Biol. 1997 Mar;61(3):353-60.  PMID: 9060459 [PubMed - indexed for MEDLINE]	
	Raport CJ, Schweickart VL, Chantry D, Eddy RL Jr, Shows TB, Godiska R, Gray PW.  New members of the chemokine receptor gene family.  J Leukoc Biol. 1996 Jan;59(1):18-23. Review.  PMID: 8558062 [PubMed - indexed for MEDLINE]	Related Articles, Links
<u></u> 1	<b>0:</b> Godiska R, Chantry D, Dietsch GN, Gray PW.  Chemokine expression in murine experimental allergic encephal J Neuroimmunol. 1995 May;58(2):167-76.  PMID: 7539012 [PubMed - indexed for MEDLINE]	Related Articles, Links alomyelitis.
1	1: Schweickart VL, Raport CJ, Godiska R. Byers MG, Eddy RL Jr, Shows TB, Gray PW.  Cloning of human and mouse EBI1, a lymphoid-specific G-proencoded on human chromosome 17q12-q21.2.  Genomics. 1994 Oct;23(3):643-50.  PMID: 7851893 [PubMed - indexed for MEDLINE]	
1	2: Godiska R, James C, Yao MC.  A distant 10-bp sequence specifies the boundaries of a program Tetrahymena.  Genes Dev. 1993 Dec;7(12A):2357-65.  PMID: 8253382 [PubMed - indexed for MEDLINE]	Related Articles, Links nmed DNA deletion in
11:	3: Seyfried CE, Schweickart VL, Godiska R, Gray PW.  The human platelet-activating factor receptor gene (PTAFR) companies to chromosome 1.  Genomics. 1992 Jul;13(3):832-4.  PMID: 1322356 [PubMed - indexed for MEDLINE]	Related Articles, Links ontains no introns and
11	4: Godiska R, Yao MC.  A programmed site-specific DNA rearrangement in Tetrahyme requires flanking polypurine tracts.  Cell. 1990 Jun 29;61(7):1237-46.  PMID: 2364428 [PubMed - indexed for MEDLINE]	Related Articles, Links na thermophila
1	5: Godiska R, Aufderheide KJ, Gilley D, Hendrie P, Fitzwater T, Preer LB, Polisky B, Preer JR Jr.  Transformation of Paramecium by microinjection of a cloned s Proc Natl Acad Sci U S A. 1987 Nov;84(21):7590-4.	

PMID: 2823267 [PubMed - indexed for MEDLINE]

☐16: Godiska R.

Related Articles, Links

Structure and sequence of the H surface protein gene of Paramecium and comparison with related genes.

Mol Gen Genet. 1987 Jul;208(3):529-36.

PMID: 3478550 [PubMed - indexed for MEDLINE]

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                 JAPIO has been reloaded and enhanced
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         Sep 16
                 Experimental properties added to the REGISTRY file
NEWS 24
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 25
         Sep 16
NEWS 26
         Sep 16
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                 CASREACT Enriched with Reactions from 1907 to 1985
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         Oct 01
NEWS 28
         Oct 21
                 EVENTLINE has been reloaded
NEWS 29
         Oct 24
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                 Nutraceuticals International (NUTRACEUT) now available on
NEWS 30
         Oct 24
STN
                 MEDLINE SDI run of October 8, 2002
NEWS 31
         Oct 25
         Nov 18
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         Nov 25 More calculated properties added to REGISTRY
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=> allergy and CCR4

29160 ALLERGY

2264 ALLERGIES

29817 ALLERGY

(ALLERGY OR ALLERGIES)

339 CCR4

20 ALLERGY AND CCR4

=> allergy and MDC

T.1

29160 ALLERGY

2264 ALLERGIES

29817 ALLERGY

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           610 MDC
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       160234 TREATMENTS
       1809421 TREATMENT
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=> treatment and L2
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       1809421 TREATMENT
                 (TREATMENT OR TREATMENTS)
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    ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                        2001:526192 CAPLUS
DOCUMENT NUMBER:
                        135:117975
TITLE:
                        Regulatory sequence for dendritic cell-specific
                        expression from human fascin genes and their use
INVENTOR(S):
                        Reske-Kunz, Angelika; Ross, Xiaolan; Ross, Ralf;
Bros,
                        Matthias
PATENT ASSIGNEE(S):
                        Germany
                        PCT Int. Appl., 117 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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                    KIND DATE
                                          APPLICATION NO. DATE
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                     A2
                           20010719
                                          WO 2001-EP362
                                                          20010112
    WO 2001051631
    WO 2001051631
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EP 2001-903644 20010112
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    EP 1250430
                         20021023
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AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

DE 2000-10001169 A 20000113

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:

DE 2000-10010188 A 20000302 WO 2001-EP362 . W 20010112

The invention relates to regulatory sequences which impart a specific AΒ expression in dendritic cells. The regulatory sequences are isolated from

the human fascin gene and also comprise, for example, promoter sequences. The invention also relates to recombinant nucleic acid mols. and vectors, which contain the regulatory sequences, and to preferred embodiments of the recombinant nucleic acid mols. and vectors, which code the antigens

or

immunoregulatory proteins. The invention addnl. relates to host cells, which contain the recombinant nucleic acid mols. or vectors, and to methods for the prodn. thereof. Addnl. embodiments relate to in-vitro methods for stimulating T cells and for producing T cell-stimulating dendritic cells, and to their formulation as medicaments. Addnl. medicaments are described which essentially relate to DNA vaccines and to gene-therapeutic medicaments, for example, for the immunization against and for the treatment of infectious diseases, tumors, allergies, Creutzfeldt-Jakob plaques or Alzheimer plaques. Addnl. inventive medicaments can be used for the targeted modulation of immune responses that is imparted by dendritic cells, for example, for treating autoimmune diseases or transplant rejection. Finally, the invention relates to different uses of the regulatory sequences. Cloning of the gene and anal. of the 5'-flanking region using a luciferase reporter gene are described.

ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:223049 CAPLUS

DOCUMENT NUMBER:

130:251233

TITLE:

Macrophage-derived chemokine (MDC),

MDC analogs, MDC inhibitor

substances, and their therapeutic applications

INVENTOR(S):

Gray, Patrick W.; Chantry, David H.; Deeley, Michael

C.; Raport, Carol J.; Godiska, Ronald

PATENT ASSIGNEE(S):

Icos Corporation, USA

SOURCE:

PCT Int. Appl., 159 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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EP	1017	818		A:	2	2000	0712		E.	P 19	98-9	5196	1	1998	0928		

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PRIORITY APPLN. INFO.:
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                                                      A2 19950607
                                       US 1995-558658 A2 19951116
                                       US 1996-660542 A2 19960607
                                       US 1997-939107 A2 19970926
                                       US 1998-67447
                                                      A2 19980428
                                       WO 1998-US20270 W 19980928
    The present invention provides purified and isolated polynucleotide
AB
     sequences encoding a novel macrophage-derived C-C chemokine designated
     "Macrophage Derived Chemokine" (MDC), and polypeptide fragments
    and analogs thereof. MDC cDNA sequences and their deduced amino
    acid sequences are provided from human, mouse, rat, and macaque. Also
    provided are materials and methods for the recombinant or synthetic
prodn.
    of the chemokine, fragments, and analogs; and purified and isolated
    chemokine protein, and polypeptide fragments and analogs thereof. Also
    provided are antibodies reactive with the chemokine and methods of making
    and using all of the foregoing. Also provided are assays for identifying
    modulators of MDC chemokine activity. MDC possesses
    antiproliferative activity against HIV-1 virus, stimulates fibroblast
    proliferation, inhibits tumor growth, induces chemotaxis of TH2 helper T
    cells, and modulates platelet aggregation, and is shown to be a
    high-affinity ligand for CCR4.
=> DIS L3 1- IBIB ABS
YOU HAVE REQUESTED DATA FROM 6 ANSWERS - CONTINUE? Y/(N):Y
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DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y
    ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS
                        2002:832576 CAPLUS
ACCESSION NUMBER:
                        Treatment of respiratory and lung diseases
TITLE:
                        with antisense oligonucleotides and a bronchodilating
                        agent
                        Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony;
INVENTOR(S):
                        Katz, Evan; Pabalan, Jonathan; Aquilar, Douglas;
                        Miller, Shoreh; Tang, Lei; Shahabuddin, Syed
                        Epigenesis Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 764 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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                    KIND DATE
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US 2001-286036P P 20010424

TJ, TM

PRIORITY APPLN. INFO.:

This patent relates to a compn. comprising a carrier, oligonucleotides (oligos) that are antisense to adenosine receptors, and contain low amts. of or no adenosine (A), plus bronchodilating agents. All antisense oligonucleotides designed in accordance with the invention were highly effective at countering or reducing effects mediated by the receptors to which they are targeted. Two antisense phosphorothicated oligos

human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor, and two targeting an A3 receptor are capable of countering the effect of exogenously administered adenosine which is mediated by the specific receptor they are targeted to. The activity of the antisense oligos are specific to the target and substitutively fail to inhibit another target. An oligonucleotide wherein the phosphodiester bonds are substituted with phosphorothioate bonds evidenced an unexpected superiority over the phosphodiester antisense oligo. In addn., they result in extremely low

or

targeting

non-existent deleterious side effects or toxicity. This represents 100% success in providing agents that are highly effective and specific in the treatment of bronchoconstriction and/or inflammation. These agents and the compn. and formulations provided are suitable for the treatment of respiratory tract, pulmonary and malignant diseases assocd. with bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others.

The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L3 ANSWER 2.OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:832575 CAPLUS

TITLE:

Treatment of respiratory and lung diseases

with antisense oligonucleotides and a bronchodilating

agent

INVENTOR(S):

Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony; Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas;

Miller, Shoreh; Tang, Lei; Shahabuddin, Syed

PATENT ASSIGNEE(S):

Epigenesis Pharmaceuticals, Inc., USA

SOURCE:

PCT Int. Appl., 872 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

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PATENT NO.
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             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     WO 2002085308
                      A2
                                          WO 2002-XC13135 20020423
                          20021031
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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PRIORITY APPLN. INFO.:
                                        US 2001-286137P P 20010424
                                        WO 2002-US13135 A 20020423
ÀΒ
     This patent relates to a compn. comprising a carrier, oligonucleotides
     (oligos) that are antisense to adenosine receptors, and contain low amts.
     of or no adenosine (A), plus bronchodilating agents. All antisense
     oligonucleotides designed in accordance with the invention were highly
     effective at countering or reducing effects mediated by the receptors to
     which they are targeted. Two antisense phosphorothicated oligos
targeting
     human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor,
     and two targeting an A3 receptor are capable of countering the effect of
     exogenously administered adenosine which is mediated by the specific
     receptor they are targeted to. The activity of the antisense oligos are
     specific to the target and substitutively fail to inhibit another target.
     An oligonucleotide wherein the phosphodiester bonds are substituted with
     phosphorothioate bonds evidenced an unexpected superiority over the
     phosphodiester antisense oligo. In addn., they result in extremely low
or
     non-existent deleterious side effects or toxicity. This represents 100%
     success in providing agents that are highly effective and specific in the
     treatment of bronchoconstriction and/or inflammation.
```

**Treatment** with antisense oligonucleotides in combination with anti-inflammatory steroid and/or ubiquinones is also provided.

agents and the compn. and formulations provided are suitable for the

treatment of respiratory tract, pulmonary and malignant diseases assocd. with bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others.

The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L3 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:756484 CAPLUS

DOCUMENT NUMBER:

133:329593

TITLE:

Low adenosine anti-sense oligonucleotide, compositions, kit and method for **treatment** 

of airway disorders associated with bronchoconstriction, lung inflammation, allergy(ies) and surfactant depletion

INVENTOR (S):

Nyce, Jonathan W.

PATENT ASSIGNEE(S):

East Carolina University, USA

SOURCE:

PCT Int. Appl., 1592 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO. DATE
    PATENT NO.
                  KIND DATE
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                                       _____
                  A2
                                      WO 2000-US8020 20000324
    WO 2000062736
                         20001026
                    A3
    WO 2000062736
                         20011011
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           DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
           KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
           MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
           TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
           TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
           DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
           CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                        20010313 BR 2000-6019
    BR 2000006019
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                         20020109
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    EP 1168919
                    A2
                                                        20000324
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO
                                     US 1999-127958P P 19990406
PRIORITY APPLN. INFO.:
                                     WO 2000-US8020
                                                    W 20000324
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OTHER SOURCE(S): MARPAT 133:329593

AB An in vivo method of selectively delivering a nucleic acid to a target gene or mRNA, comprises the topical administration, e.g. to the respiratory system, of a subject of a therapeutic amt. of an oligonucleotide (oligo) that is antisense to the initiation codon region, the coding region, the 5' or 3' intron-exon junctions or regions within 2 to 10 nucleotides of the junctions of the gene or antisense to a mRNA complementary to the gene in an amt. effective to reach the target polynucleotide and reducing or inhibiting expression. In addn. a method of treating an adenosine-mediated effect comprises topically administering

to a subject an antisense oligo in an amt. effective to treat the respiratory, pulmonary, or airway disease. In order to minimize triggering adenosine receptors by their metab., the administered oligos have a low content of or are essentially free of adenosine. A pharmaceutical compn. and formulations comprise the oligo antisense to an adenosine receptor, genes and mRNAs encoding them, genomic and mRNA flanking regions, intron and exon borders and all regulatory and functionally related segments of the genes and mRNAs encoding the polypeptides, their salts and mixts. Various formulations contain a requisite carrier, and optionally other additives and biol. active agents.

The low-adenosine or adenosine-free (des-A) agent for practicing the method of the invention may be prepd. by selecting a target gene(s), genomic flanking region(s), RNA(s) and/or polypeptide(s) assocd. with a disease(s) or condition(s) afflicting lung airways, obtaining the sequence

of the mRNA(s) corresponding to the target gene(s) and/or genomic flanking

region(s), and/or RNAs encoding the target polypeptide(s), selecting at least one segment of the mRNA which may be up to 60 % free of thymidine (T) and synthesizing one or more anti-sense oligonucleotide(s) to the mRNA

segments which are free of adenosine (A) by substituting a universal base for A when present in the oligonucleotide. The agent may be prepd. by selection of target nucleic acid sequences with GC running stretches, which have low T content, and by optionally replacing A in the antisense oligonucleotides with a "Universal or alternative base". The agent, compn. and formulations are used for prophylactic, preventive and therapeutic treatment of ailments assocd. with impaired respiration, lung allergy(ies) and/or inflammation and depletion lung surfactant or surfactant hypoprodn., such as pulmonary vasoconstriction, inflammation, allergies, allergic rhinitis, asthma, impeded respiration, lung pain, cystic fibrosis, bronchoconstriction. The present treatment is suitable for administration in combination with other treatments, e.g. before, during and after other treatments, including radiation, chemotherapy, antibody therapy and surgery, among others. Alternatively, the present agent is effectively administered prophylactically or therapeutically by itself for conditions without known therapies or as a substitute for therapies exhibiting undesirable side effects. The treatment of this invention may be administered directly into the respiratory system of a subject so that the agent has direct access to

lungs, or by other effective routes of administration, e.g. topically, transdermally, by implantation, etc., in an amt. effective to reduce or inhibit the symptoms of the ailment.

L3 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:628006 CAPLUS

DOCUMENT NUMBER: 133:217723

TITLE: Method for validating/invalidating target(s) and

pathways

INVENTOR(S): Nyce, Jonathan W.

PATENT ASSIGNEE(S): Epigenesis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

the

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PATENT NO. KIND DATE APPLICATION NO. DATE
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                  A1 20000908 WO 2000-US5643 20000302
    WO 2000051621
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    BR 2000009247
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           IE, SI, LT, LV, FI, RO
                                      JP 2000-602288
                                                       20000302
    JP 2002537792
                   T2 20021112
                                    US 1999-122950P P 19990305
PRIORITY APPLN. INFO.:
                                    WO 2000-US5643
                                                   W 20000302
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OTHER SOURCE(S): MARPAT 133:217723

A method of detg. the existence of a correlation between a function of a disease or condition and a gene or mRNA encoding a target polypeptide suspected of being assocd. with a disease or condition, comprises obtaining oligonucleotides (oligos) consisting of up to about 15 % adenosine (A), preferably having no adenosine content, and which is anti-sense to a target selected from the group consisting of target genes and their corresponding mRNAs, genomic and mRNA flanking regions selected from the group consisting of 3' and 5' intron-exon borders and the juxta-section between coding and non-coding regions, and all mRNA seaments

encoding polypeptides assocd. with a pre-selected disease or condition; selecting amongst the oligos one that significantly inhibits or ablates expression of the polypeptide encoded by the mRNA upon in vitro hybridization to the target mRNA; administering to a subject an amt. of the selected oligo effective for in vivo hybridization to the target mRNA;

and assessing a subject's function that is assocd. with the disease or condition before and after administration of the oligo; wherein a change in the function's value greater than about 70% indicates a pos. correlation, between about 40 and about 70% a possible correlation, and below about 30% a lack of correlation. The present method preferably administers the oligos in situ where the target is located, e.g. into the subject's respiration when validating targets assocd. with malignant and other pulmonary and respiratory functions, so that the agent has direct access to the lungs. Alternatively, such desAdenosine oligos may be delivered directly to the CNS or other organs, tissues and organ systems, by known delivery formulations. This invention provides a rapid, reliable

method for drug target validation/invalidation in various biol. systems that utilize proprietary low or desAdenosine antisense oligonucleotides. Using desAdenosine antisense oligonucleotides, the present method may validate/invalidate potential gene targets with a level of speed and accuracy that has heretofore been impossible using traditional techniques.

The use of antisense oligonucleotides to target adenosine receptors is described. Adenosine Al receptor antisense oligonucleotides had bronchodilator activity in rabbits and adenosine A3 receptor antisense oligonucleotides had anti-inflammatory activity in asthmatic rabbits. THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 5 OF 6 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:223049 CAPLUS DOCUMENT NUMBER: 130:251233 Macrophage-derived chemokine (MDC), MDC analogs, MDC TITLE: inhibitor substances, and their therapeutic applications Gray, Patrick W.; Chantry, David H.; Deeley, Michael INVENTOR(S): C.; Raport, Carol J.; Godiska, Ronald PATENT ASSIGNEE(S): Icos Corporation, USA SOURCE: PCT Int. Appl., 159 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ \_\_\_\_\_\_ A2 WO 1998-US20270 19980928 WO 9915666 19990401 WO 9915666 A3 19990916 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 19971029 CN 1996-190875 CN 1163635 19960607 Α US 5932703 19990803 US 1996-660542 19960607 Α AA CA 2302806 19990401 CA 1998-2302806 19980928 AU 1998-97778 AU 9897778 A1 19990412 19980928 A2 20000712 EP 1998-951961 EP 1017818 19980928 R: AT, BE, CH, DE, ES, FR, GB, IT, LI, SE, IE PRIORITY APPLN. INFO.: US 1995-479620 A2 19950607 US 1995-558658 A2 19951116 US 1996-660542 A2 19960607 US 1997-939107 A2 19970926 A2 19980428 US 1998-67447 WO 1998-US20270 W 19980928 The present invention provides purified and isolated polynucleotide AB sequences encoding a novel macrophage-derived C-C chemokine designated

"Macrophage Derived Chemokine" (MDC), and polypeptide fragments and analogs thereof. MDC cDNA sequences and their deduced amino acid sequences are provided from human, mouse, rat, and macaque. Also provided

are materials and methods for the recombinant or synthetic prodn. of the chemokine, fragments, and analogs; and purified and isolated chemokine protein, and polypeptide fragments and analogs thereof. Also provided

antibodies reactive with the chemokine and methods of making and using all

are

of the foregoing. Also provided are assays for identifying modulators of MDC chemokine activity. MDC possesses antiproliferative activity against HIV-1 virus, stimulates fibroblast proliferation, inhibits tumor growth, induces chemotaxis of TH2 helper T cells, and modulates platelet

PATENT ASSIGNEE(S):

Germany

SOURCE:

PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

DANGUAGE.

Germa

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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KIND DATE
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    WO 2001051631 A2 20010719
WO 2001051631 A3 20020418
                                         WO 2001-EP362
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            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A1 20010726 DE 2000-10001169 20000113
A2 20021023 EP 2001-903644 20010112
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     EP 1250430
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                                       DE 2000-10001169 A 20000113
PRIORITY APPLN. INFO.:
                                       DE 2000-10010188 A 20000302
                                       WO 2001-EP362
                                                      W 20010112
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AB The invention relates to regulatory sequences which impart a specific expression in dendritic cells. The regulatory sequences are isolated from

the human fascin gene and also comprise, for example, promoter sequences. The invention also relates to recombinant nucleic acid mols. and vectors, which contain the regulatory sequences, and to preferred embodiments of the recombinant nucleic acid mols. and vectors, which code the antigens

or

immunoregulatory proteins. The invention addnl. relates to host cells, which contain the recombinant nucleic acid mols. or vectors, and to methods for the prodn. thereof. Addnl. embodiments relate to in-vitro methods for stimulating T cells and for producing T cell-stimulating dendritic cells, and to their formulation as medicaments. Addnl. medicaments are described which essentially relate to DNA vaccines and to gene-therapeutic medicaments, for example, for the immunization against and for the treatment of infectious diseases, tumors, allergies, Creutzfeldt-Jakob plaques or Alzheimer plaques. Addnl. inventive medicaments can be used for the targeted modulation of immune responses that is imparted by dendritic cells, for example, for treating autoimmune diseases or transplant rejection. Finally, the invention relates to different uses of the regulatory sequences. Cloning of the gene and anal.

of the 5'-flanking region using a luciferase reporter gene are described.

L2 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:402803 CAPLUS

DOCUMENT NUMBER:

136:84180

TITLE:

Chemokines, chemokine receptors and allergy

AUTHOR(S):

Kaplan, Allen P.

CORPORATE SOURCE:

Division of Pulmonary Diseases and Central Case

Medicine and Allergy and, Medical University of South

Carolina, Charleston, SC, USA

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NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
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PRIORITY APPLN. INFO.:
                                        US 1997-59160P
                                                        Ρ
                                                            19970917
                                        US 1998-93972
                                                        A 19980609
                                        WO 1998-US19419 W 19980917
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AB Antisense oligonucleotides carrying sequences that will allow them to bind

to more than one mRNA in a target cell are described. Such oligonucleotides can be used as a single treatment for diseases having more than one contributing pathway. In particular, oligonucleotides effective against genes involved in the etiol. of respiratory disease are targeted. Preferably, the oligonucleotides are low in adenosine (.ltoreq.15%) and may have adenosines substituted with analogs. These of the substitute of the sequences within mRNAs.

Thus,

phosphorothioate antisense oligonucleotide (HAdA1AS, 5'-gatggagggcggcatggcggg-3') designed for the adenosine Al receptor is provided. HAdA1AS significantly and specifically reduces the in vivo response to adenosine challenge in a dose-dependent manner, is effective in protection against aeroallergen-induced bronchoconstriction (house

dust

mite), has an unexpected long-term duration of effect (8.3 days for both PC50 adenosine and resistance), and is free of side effects that might be toxic to the recipient. Such oligonucleotides may be used for treating a disease or condition assocd with lung airway, such as bronchoconstriction, inflammation, or allergies.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

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aggregation, and is shown to be a high-affinity ligand for CCR4. ANSWER 6 OF 6 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:219995 CAPLUS DOCUMENT NUMBER: 130:306599 Antisense oligonucleotides capable of binding to TITLE: multiple targets and their use in the treatment of respiratory disease INVENTOR(S): Nyce, Jonathan W. East Carolina University, USA PATENT ASSIGNEE(S): PCT Int. Appl., 120 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE -----\_\_\_\_\_\_ WO 9913886 ---- Al 19990325 WO 1998-US19419 19980917 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH; GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AACA 2304312 19990325 CA 1998-2304312 19980917 AU 9893951 A1 19990405 AU 1998-93951 19980917 AU 752531 B2 20020919 EP 1998-947089 19980917 EP 1019065 A1 20000719 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FΤ BR 9812650 20000822 BR 1998-12650 19980917 PRIORITY APPLN. INFO.: US 1997-59160P P 19970917 US 1998-93972 A 19980609 WO 1998-US19419 W 19980917 AB Antisense oligonucleotides carrying sequences that will allow them to bind to more than one mRNA in a target cell are described. Such oligonucleotides can be used as a single treatment for diseases having more than one contributing pathway. In particular, oligonucleotides effective against genes involved in the etiol. of

to more than one mRNA in a target cell are described. Such oligonucleotides can be used as a single **treatment** for diseases having more than one contributing pathway. In particular, oligonucleotides effective against genes involved in the etiol. of respiratory disease are targeted. Preferably, the oligonucleotides are low in adenosine (.ltoreq.15%) and may have adenosines substituted with analogs. These oligonucleotides are targeted to high (G+C) sequences within mRNAs. Thus, phosphorothioate antisense oligonucleotide (HAdA1AS, 5'-gatggaggggggatggcggg-3') designed for the adenosine A1 receptor is provided. HAdA1AS significantly and specifically reduces the in vivo response to adenosine challenge in a dose-dependent manner, is effective in protection against aeroallergen-induced bronchoconstriction (house

dust

mite), has an unexpected long-term duration of effect (8.3 days for both PC50 adenosine and resistance), and is free of side effects that might be toxic to the recipient. Such oligonucleotides may be used for treating a disease or condition assocd. With lung airway, such as

bronchoconstriction, inflammation, or allergies.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

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THE ESTIMATED COST FOR THIS REQUEST IS 27.47 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L2 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:549831 CAPLUS

DOCUMENT NUMBER:

137:139275

TITLE:

Nickel-specific CD4+ and CD8+ T cells display

distinct

migratory responses to chemokines produced during

allergic contact dermatitis

AUTHOR (S):

Sebastiani, Silvia; Albanesi, Cristina; Nasorri, Francesca; Girolomoni, Giampiero; Cavani, Andrea Laboratory of Immunology, Istituto Dermopatico

CORPORATE SOURCE:

dell'Immacolata, IRCCS, Rome, 00167, Italy

Journal o

SOURCE:

Journal of Investigative Dermatology (2002), 118(6),

1052-1058

CODEN: JIDEAE; ISSN: 0022-202X Blackwell Publishing, Inc.

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

AB Development of allergic contact dermatitis to haptens depends upon a balance between CD8+ T lymphocytes with pathogenic activity and CD4+ T cells, which comprise both effector and regulatory cells. Thus, differential recruitment of CD8+ and CD4+ lymphocytes to sites of hapten challenge may have considerable impact on disease expression. Here the migration of cutaneous lymphocyte-assocd. antigen+, nickel-specific CD8+ and CD4+ T cell lines were compared with a panel of chemokines produced in

the skin during allergic contact dermatitis. CCL17/TARC and CCL22/MDC induced a 3-fold higher migration of CD4+ compared with CD8+ lymphocytes. In contrast, CXCL10/IP-10 was 2-fold more potent in attracting CD8+ cells. These findings were consistent with the higher expression of CCR4 and CXCR3 on CD4+ and CD8+ T cell lines, resp. Moreover, CCR4 expression was high on nickel-specific T helper 2, intermediate on T helper 1 and T cytotoxic 2, and almost undetectable on

T

cytotoxic 1 clones. On the contrary, CXCR3 was expressed by T cytotoxic

and 2 and T helper 1, but not T helper 2 clones. Reverse transcription-polymerase chain reaction anal. of the skin before and after

hapten challenge revealed the constitutive presence of TARC, and the early  $\dot{}$ 

appearance of CCL2/MCP-1, followed by IP-10, CCL4/MIP-1.beta., and MDC mRNA. Supernatants from activated keratinocytes induced a strong migration of CD8+ lymphocytes, which was blocked by neutralization of IP-10. Conversely, supernatants from immature and mature dendritic cells attracted mostly CD4+ lymphocytes in a TARC- and MDC -dependent manner. Our data indicate that distinct chemokines and cell types control the accumulation of CD8+ and CD4+ T cells within inflamed skin.

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L2 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:479577 CAPLUS

DOCUMENT NUMBER: 137:92625

TITLE: Human epithelial cells trigger dendritic

cell-mediated

allergic inflammation by producing TSLP

AUTHOR(S): Soumelis, Vassili; Reche, Pedro A.; Kanzler, Holger;

Yuan, Wei; Edward, Gina; Homey, Bernhart; Gilliet, Michel; Ho, Steve; Antonenko, Svetlana; Lauerma, Annti; Smith, Kathleen; Gorman, Daniel; Zurawski, Sandra; Abrams, Jon; Menon, Satish; McClanahan,

Terri;

de Waal-Malefyt, Rene; Bazan, Fernando; Kastelein,

Robert A.; Liu, Yong-Jun

CORPORATE SOURCE: DNAX, Palo Alto, CA, 94304, USA

SOURCE: Nature Immunology (2002), 3(7), 673-680

CODEN: NIAMCZ; ISSN: 1529-2908

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal LANGUAGE: English

AB Whether epithelial cells play a role in triggering the immune cascade leading to T helper 2 (TH2)-type allergic inflammation is not known. We show here that human thymic stromal lymphopoietin (TSLP) potently activated CD11c+ dendritic cells (DCs) and induced prodn. of the

TH2-attracting chemokines TARC (thymus and activation-regulated chemokine;

also known as CCL17) and MDC (macrophage-derived chemokine; CCL22). TSLP-activated DCs primed naive TH cells to produce the proallergic cytokines interleukin 4 (IL-4), IL-5, IL-13 and tumor necrosis

factor-.alpha., while down-regulating IL-10 and interferon-.gamma.. TSLF was highly expressed by epithelial cells, esp. keratinocytes from patients

with atopic dermatitis. TSLP expression was assocd. with Langerhans cell migration and activation in situ. These findings shed new light on the function of human TSLP and the role played by epithelial cells and DCs in initiating allergic inflammation.

REFERENCE COUNT:

43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L2 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:429201 CAPLUS

DOCUMENT NUMBER:

137:4997

TITLE:

Method for diagnosing allergic diseases using DNA and

protein microarray technology

INVENTOR(S):

Schmidt-Weber, Carsten; Blaser, Kurt; Wohlfahrt, Jan

PATENT ASSIGNEE(S):

Genescan Europe Ag, Germany

SOURCE:

PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2002044732 A2 20020606 WO 2001-EP13937 20011129

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                      A1 20020710
                                         EP 2000-126117
                                                          20001129
    EP 1221618
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    AU 2002021906
                     A5 20020611
                                          AU 2002-21906
                                       EP 2000-126117
                                                        A 20001129
PRIORITY APPLN. INFO.:
                                       WO 2001-EP13937 W 20011129
    MRNA of activated lymphocytes such as CD4+ T cells allows differential
```

AB MRNA of activated lymphocytes such as CD4+ T cells allows differential diagnosis of allergic diseases. The CD4+ T cells are isolated and stimulated under defined conditions in vitro. Subsequently, mRNA is subjected to multigene anal. such as DNA arrays. Expression profiling images, such as gene expression profiles, can be created, which allow on the basis of the activated T cell mRNA the prediction of certain phenotypes such as asthma or atopic dermatitis.

L2 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS

49

ACCESSION NUMBER:

2002:354656 CAPLUS

DOCUMENT NUMBER:

137:31703

TITLE:

Cytokines and chemoattractants in allergic

inflammation

AUTHOR(S):

Romagnani, Š. 🥖

CORPORATE SOURCE:

Department of Internal Medicine, and Respiratory Diseases, Allergy, Section of Clinical Immunology, University of Florence, Florence, 50134, Italy Molecular Immunology (2002), 38(12-13), 881-885

SOURCE:

CODEN: MOIMD5; ISSN: 0161-5890

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal; General Review

LANGUAGE: English

A review. It is now generally accepted that type 2 T helper (Th2) cytokines and some chemoattractants play an essential role in the pathogenesis of the allergic inflammation. The effects of Th2 cytokines, such as interleukin (IL)-4, IL-5, IL-9, and IL-13, account for virtually all the pathophysiol. manifestations of allergy and asthma. Moreover, both Th2 cells and the effector cells usually present in the areas of allergic inflammation (basophils, mast cells, and eosinophils) express chemoattractant receptors, such as CCR3, CCR4, CCR8, and CRTH2. Therefore, interactions of eotaxin(s), eotaxin/CCL11, RANTES/CCL5, and MCP-1/CCL2, MCP-2/CCL8, MCP-3/CCL7, MCP-4/CCL13 with CCR3 are responsible for the recruitment of basophils, eosinophils and mast cells, whereas interactions of CCR4 with MDC/CCL22 or TARC/CCL17, CCR8 with , I-309/CCL1, and CRTH2 with PGD2 play a crit. role in the allergen-induced recruitment of Th2 cells in the target tissues of allergic inflammation. The demonstration that Th2-polarized responses against allergens represent

the triggering event for the development of allergic diseases, together with the recognition that some chemoattractants are responsible for the recruitment of both Th2 cells and other effector cells of allergic inflammation, can provide the conceptual basis for the development of new therapeutic strategies in allergic conditions.

REFERENCE COUNT:

THERE ARE 49 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

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ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
T<sub>1</sub>2
                           2001:693651 CAPLUS
ACCESSION NUMBER:
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135:240908 DOCUMENT NUMBER:

Assay for agents that induce chemokinesis TITLE:

Carson, Dennis A.; Leoni, Lorenzo M.; Cottam, Howard INVENTOR (S):

Regents of the University of California, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 48 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                KIND DATE
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                  A1 20010920 WO 2001-US8581 20010316
    WO 2001069240
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           BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    US 2002010125
                   A1 20020124
                                     US 2001-810010
PRIORITY APPLN. INFO.:
                                    US 2000-189976P P 20000316
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The present invention provides methods for identifying compds. that can induce cellular chemokinesis. According to the present invention, chemokinesis interferes with immune and inflammatory responses by increasing cell movements and altering cell migration patterns. Surprisingly, compds. isolated according to the present invention can interfere with the spread of malignant cells through the body, reduce inflammatory responses and can cause leukocytes to be retained in lymph nodes, the spleen and other organs of the reticulo-endothelial system. Several methods are contemplated by the present invention for identifying compds. which can induce chemokinesis. In one embodiment the method involves contacting a population of target cells with a test compd. and observing whether the target cells produce a chemotactic mol.; wherein

the

target cell has a cognate receptor for the chemotactic mol. In another embodiment, the method involves contacting a population of target cells with a test compd. and observing whether the targets cells homotypically aggregate. In yet another embodiment, the method involves contacting a population of target cells with a test compd. and observing whether actin filaments in the target cells form stress fibers.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

**FORMAT** 

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:526192 CAPLUS

4

DOCUMENT NUMBER: 135:117975

Regulatory sequence for dendritic cell-specific TITLE: expression from human fascin genes and their use

INVENTOR(S): Reske-Kunz, Angelika; Ross, Xiaolan; Ross, Ralf;

Bros,

Matthias

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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
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                           19971029
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                                         EP 1998-951961
                                                           19980928
     EP 1017818
                      A2
                           20000712
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, SE, IE
PRIORITY APPLN. INFO.:
                                       US 1995-479620
                                                        A2 19950607
                                       US 1995-558658
                                                        A2 19951116
                                       US 1996-660542
                                                       A2 19960607
                                       US 1997-939107
                                                       A2 19970926
                                       US 1998-67447
                                                        A2 19980428
                                       WO 1998-US20270 W 19980928
     The present invention provides purified and isolated polynucleotide
AB
     sequences encoding a novel macrophage-derived C-C chemokine designated
     "Macrophage Derived Chemokine" (MDC), and polypeptide fragments and
     analogs thereof. MDC cDNA sequences and their deduced amino acid
     sequences are provided from human, mouse, rat, and macaque. Also
provided
     are materials and methods for the recombinant or synthetic prodn. of the
     chemokine, fragments, and analogs; and purified and isolated chemokine
     protein, and polypeptide fragments and analogs thereof. Also provided
are
     antibodies reactive with the chemokine and methods of making and using
all
     of the foregoing. Also provided are assays for identifying modulators of
     MDC chemokine activity. MDC possesses antiproliferative activity against
     HIV-1 virus, stimulates fibroblast proliferation, inhibits tumor growth,
     induces chemotaxis of TH2 helper T cells, and modulates platelet
     aggregation, and is shown to be a high-affinity ligand for CCR4.
    ANSWER 20 OF 20 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                        1999:219995 CAPLUS
DOCUMENT NUMBER:
                         130:306599
                         Antisense oligonucleotides capable of binding to
TITLE:
                        multiple targets and their use in the treatment of
                        respiratory disease
                      Nyce, Jonathan W.
INVENTOR(S):
                        East Carolina University, USA
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 120 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO. DATE
     PATENT NO.
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     WO 9913886 A1∤ 19990325
                                         WO 1998-US19419 19980917
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             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
```

DOCUMENT NUMBER: 132:48648

Chemokines fundamental to the inflammation associated TITLE:

with allergic disorders

AUTHOR(S):

Hirai, Koichi

CORPORATE SOURCE:

Dep. of Bioregul. and Funct., Univ. of Tokyo Grad.

Sch. of Med., Japan

SOURCE:

Saishin Igaku (1999), 54(12), 2884-2887

CODEN: SAIGAK; ISSN: 0370-8241

PUBLISHER: Saishin Igakusha

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

Japanese

A review, with 19 refs., on expression of chemokine receptors on eosinophils, increased expression of eotaxin in allergic inflammation sites of human, cytokines regulating eotaxin expression, and CCR3 as a single receptor for eotaxin. Attempts of therapy for allergic inflammation by inhibiting TARC (thymus- and activation-regulated chemokine) and MDC (macrophage-derived chemokine) on Th2 cells are also discussed.

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1999:223049 CAPLUS

DOCUMENT NUMBER:

130:251233

TITLE:

Macrophage-derived chemokine (MDC),

MDC analogs, MDC inhibitor

substances, and their therapeutic applications

Gray, Patrick W.; Chantry, David H.; Deeley, Michael

C.; Raport, Carol J.; Godiska, Ronald

Icos Corporation, USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 159 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

SOURCE:

English

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FAMILY ACC. NUM. COUNT:

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	WO	9915																	
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			CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG							
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	ΑU	9897	778		A:	1 :	1999	0412		7	U 19	98-9	7778		1998	0928			
	ΕP	10178	318		A2	2 :	2000	0712.		E	P 19	98-9	5196	1	1998	0928			
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					,				τ	JS 1	996-	6605	42	A2	1996	0607			
									τ	JS 1	.997-	9391	07	A2	1997	0926			
									Ţ	JS 1	998-	6744	7	A2	1998	0428			
									Ţ	WO 1	998-	US20	270	W	1998	0928			

AB The present invention provides purified and isolated polynucleotide sequences encoding a novel macrophage-derived C-C chemokine designated "Macrophage Derived Chemokine" (MDC), and polypeptide fragments and analogs thereof. MDC cDNA sequences and their deduced amino acid sequences are provided from human, mouse, rat, and macaque. Also provided are materials and methods for the recombinant or synthetic prodn.

of the chemokine, fragments, and analogs; and purified and isolated chemokine protein, and polypeptide fragments and analogs thereof. Also provided are antibodies reactive with the chemokine and methods of making and using all of the foregoing. Also provided are assays for identifying modulators of MDC chemokine activity. MDC possesses antiproliferative activity against HIV-1 virus, stimulates fibroblast proliferation, inhibits tumor growth, induces chemotaxis of TH2 helper T cells, and modulates platelet aggregation, and is shown to be a high-affinity ligand for CCR4.

## => DIS L1 1- IBIB ABS

YOU HAVE REQUESTED DATA FROM 20 ANSWERS - CONTINUE? Y/(N):Y THE ESTIMATED COST FOR THIS REQUEST IS 45.78 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L1 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:832576 CAPLUS

TITLE: Treatment of respiratory and lung diseases with

antisense oligonucleotides and a bronchodilating

agent

INVENTOR(S):
Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony;

Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas;

Miller, Shoreh; Tang, Lei; Shahabuddin, Syed

PATENT ASSIGNEE(S): Epigenesis Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 764 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
     WO 2002085309
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                           20021031
                                         WO 2002-US13143 20020423
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                       US 2001-286036P P 20010424
    This patent relates to a compn. comprising a carrier, oligonucleotides
     (oligos) that are antisense to adenosine receptors, and contain low amts.
    of or no adenosine (A), plus bronchodilating agents. All antisense
     oligonucleotides designed in accordance with the invention were highly
     effective at countering or reducing effects mediated by the receptors to
    which they are targeted. Two antisense phosphorothioated oligos
targeting
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human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor, and two targeting an A3 receptor are capable of countering the effect of exogenously administered adenosine which is mediated by the specific receptor they are targeted to. The activity of the antisense oligos are specific to the target and substitutively fail to inhibit another target. An oligonucleotide wherein the phosphodiester bonds are substituted with phosphorothicate bonds evidenced an unexpected superiority over the phosphodiester antisense oligo. In addn., they result in extremely low

or

non-existent deleterious side effects or toxicity. This represents 100% success in providing agents that are highly effective and specific in the treatment of bronchoconstriction and/or inflammation. These agents and the compn. and formulations provided are suitable for the treatment of respiratory tract, pulmonary and malignant diseases assocd. With bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others. The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized

as

a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L1 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:832575 CAPLUS

TITLE:

Treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating

agent

INVENTOR(S):

Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony; Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas;

Miller, Shoreh; Tang, Lei; Shahabuddin, Syed Epigenesis Pharmaceuticals, Inc., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 872 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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                                   WO 2002-US13135 20020423
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            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     WO 2002085308
                      A2 20021031
                                         WO 2002-XC13135 20020423
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        US 2001-286137P P 20010424
                                        WO 2002-US13135 A 20020423
     This patent relates to a compn. comprising a carrier, oligonucleotides
     (oligos) that are antisense to adenosine receptors, and contain low amts.
     of or no adenosine (A), plus bronchodilating agents. All antisense
     oligonucleotides designed in accordance with the invention were highly
     effective at countering or reducing effects mediated by the receptors to
     which they are targeted. Two antisense phosphorothioated oligos
targeting
     human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor,
     and two targeting an A3 receptor are capable of countering the effect of
     exogenously administered adenosine which is mediated by the specific
     receptor they are targeted to. The activity of the antisense oligos are
     specific to the target and substitutively fail to inhibit another target.
     An oligonucleotide wherein the phosphodiester bonds are substituted with
     phosphorothioate bonds evidenced an unexpected superiority over the
     phosphodiester antisense oligo. In addn., they result in extremely low
or
     non-existent deleterious side effects or toxicity. This represents 100%
     success in providing agents that are highly effective and specific in the
     treatment of bronchoconstriction and/or inflammation. Treatment with
     antisense oligonucleotides in combination with anti-inflammatory steroid
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pulmonary and malignant diseases assocd. with bronchoconstriction, respiratory tract inflammation and **allergies**, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as **allergies**, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary

and/or ubiquinones is also provided. These agents and the compn. and formulations provided are suitable for the treatment of respiratory

fibrosis,

tract,

RDA, COPD, and cancers, among others. The present agents and compn. may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

L1 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:571773 CAPLUS

DOCUMENT NUMBER: 137:153743

TITLE: Airway hyperresponsiveness, but not airway

remodeling,

is attenuated during chronic pulmonary allergic

responses to Aspergillus in CCR4-/- mice

AUTHOR(S): Schuh, Jane M.; Power, Christine A.; Proudfoot,

Amanda

E.; Kunkel, Steven L.; Lukacs, Nicholas W.; Hogaboam,

Cory M.

CORPORATE SOURCE: Department of Pathology, University of Michigan

Medical School, Ann Arbor, MI, USA

SOURCE: FASEB Journal (2002), 16(10), 1313-1315,

10.1096/fj.02-0193fje

CODEN: FAJOEC; ISSN: 0892-6638

PUBLISHER: Federation of American Societies for Experimental

Biology

DOCUMENT TYPE: Journal LANGUAGE: English

AB The role of CC chemokine receptor 4 (CCR4) during the development and maintenance of Th2- type allergic airway disease is controversial. In this study, we examd the role of CCR4 in the chronic allergic airway response to live Aspergillus fumigatus spores, or conidia, in A. fumigatus-sensitized mice. After the conidia challenge, mice lacking CCR4 (CCR4-/- mice) exhibited

significantly increased nos. of airway neutrophils and macrophages, and conidia were more rapidly eliminated from these mice compared with control

CCR4 wild-type (CCR4+/+) mice. Significant airway hyperresponsiveness to i.v. methacholine was obsd. at day 3 in CCR4-/- mice, whereas at days 7 and 30, airway hyperresponsiveness was attenuated in these mice compared with control mice. A major redn.

peribronchial and airway eosinophilia was obsd. in CCR4-/- mice at all times after conidia challenge in contrast to CCR4+/+ mice. Further, whole lung levels of interleukin (IL) 4 and IL-5 were significantly increased in CCR4-/- mice at day 3, whereas these Th2 cytokines and IL-13 were significantly decreased at day 30 in CCR4-/- mice compared with their wild-type counterparts. Peribronchial fibrosis and goblet cell hyperplasia were similar in both groups of mice throughout the course of this model. In summary, CCR4 modulates both innate and acquired immune responses assocd. with chronic fungal asthma.

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

in

L1 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:549831 CAPLUS

DOCUMENT NUMBER: 137:139275

Nickel-specific CD4+ and CD8+ T cells display TITLE: distinct

migratory responses to chemokines produced during

allergic contact dermatitis

Sebastiani, Silvia; Albanesi, Cristina; Nasorri, AUTHOR (S):

Francesca; Girolomoni, Giampiero; Cavani, Andrea Laboratory of Immunology, Istituto Dermopatico

CORPORATE SOURCE: dell'Immacolata, IRCCS, Rome, 00167, Italy

Journal of Investigative Dermatology (2002), 118(6),

1052-1058

CODEN: JIDEAE; ISSN: 0022-202X

Blackwell Publishing, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

Development of allergic contact dermatitis to haptens depends upon a balance between CD8+ T lymphocytes with pathogenic activity and CD4+ T cells, which comprise both effector and regulatory cells. Thus, differential recruitment of CD8+ and CD4+ lymphocytes to sites of hapten

challenge may have considerable impact on disease expression. Here the migration of cutaneous lymphocyte-assocd. antigen+, nickel-specific CD8+ and CD4+ T cell lines were compared with a panel of chemokines produced

in

the skin during allergic contact dermatitis. CCL17/TARC and CCL22/MDC induced a 3-fold higher migration of CD4+ compared with CD8+ lymphocytes. In contrast, CXCL10/IP-10 was 2-fold more potent in attracting CD8+

cells.

These findings were consistent with the higher expression of CCR4 and CXCR3 on CD4+ and CD8+ T cell lines, resp. Moreover, CCR4 expression was high on nickel-specific T helper 2, intermediate on T helper 1 and T cytotoxic 2, and almost undetectable on T cytotoxic 1

clones. On the contrary, CXCR3 was expressed by T cytotoxic 1 and 2 and

helper 1, but not T helper 2 clones. Reverse transcription-polymerase chain reaction anal. of the skin before and after hapten challenge revealed the constitutive presence of TARC, and the early appearance of CCL2/MCP-1, followed by IP-10, CCL4/MIP-1.beta., and MDC mRNA. Supernatants from activated keratinocytes induced a strong migration of CD8+ lymphocytes, which was blocked by neutralization of IP-10. Conversely, supernatants from immature and mature dendritic cells attracted mostly CD4+ lymphocytes in a TARC- and MDC-dependent manner. Our data indicate that distinct chemokines and cell types control the

accumulation of CD8+ and CD4+ T cells within inflamed skin. REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR

THIS

SOURCE:

PUBLISHER:

RECORD. ALL CITATIONS AVAILABLE IN THE RE

## **FORMAT**

SOURCE:

ANSWER 5 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:354656 CAPLUS

DOCUMENT NUMBER: 137:31703

TITLE: Cytokines and chemoattractants in allergic

> inflammation Romagnani, S.

AUTHOR(S): CORPORATE SOURCE: Department of Internal Medicine, and Respiratory

Diseases, Allergy, Section of Clinical Immunology,

University of Florence, Florence, 50134, Italy

Molecular Immunology (2002), 38(12-13), 881-885

CODEN: MOIMD5; ISSN: 0161-5890

Elsevier Science Ltd. PUBLISHER: DOCUMENT TYPE: Journal; General Review LANGUAGE: English

A review. It is now generally accepted that type 2 T helper (Th2) cytokines and some chemoattractants play an essential role in the pathogenesis of the allergic inflammation. The effects of Th2 cytokines, such as interleukin (IL)-4, IL-5, IL-9, and IL-13, account for virtually all the pathophysiol. manifestations of allergy and asthma. Moreover, both Th2 cells and the effector cells usually present in the areas of allergic inflammation (basophils, mast cells, and eosinophils) express chemoattractant receptors, such as CCR3, CCR4, CCR8, and CRTH2. Therefore, interactions of eotaxin(s), eotaxin/CCL11,

RANTES/CCL5, and MCP-1/CCL2, MCP-2/CCL8, MCP-3/CCL7, MCP-4/CCL13 with CCR3 are responsible for the recruitment of basophils, eosinophils and mast cells, whereas interactions of CCR4 with MDC/CCL22 or TARC/CCL17, CCR8 with I-309/CCL1, and CRTH2 with PGD2 play a crit. role in the allergen-induced recruitment of Th2 cells in the target tissues of allergic inflammation. The demonstration that Th2-polarized responses against allergens represent the triggering event for the development of allergic diseases, together with the recognition that some

chemoattractants are responsible for the recruitment of both Th2 cells

and

other effector cells of allergic inflammation, can provide the conceptual basis for the development of new therapeutic strategies in allergic conditions.

REFERENCE COUNT:

THERE ARE 49 CITED REFERENCES AVAILABLE FOR 49

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 6 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:304568 CAPLUS

DOCUMENT NUMBER:

137:167744

TITLE:

The role of TARC in the pathogenesis of allergic

asthma

AUTHOR(S):

Berin, M. Cecilia

CORPORATE SOURCE:

Division of Pediatric Allergy and Immunology, Mount

Sinai School of Medicine, New York, NY, USA Drug News & Perspectives (2002), 15(1), 10-16

SOURCE:

CODEN: DNPEED; ISSN: 0214-0934

PUBLISHER:

Prous Science

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

A review. TARC (thymus and activation-regulated chemokine), as a selective chemoattractant of Th2 cells, is a reasonable candidate as a key

regulator of Th2-mediated inflammation in allergic asthma. Studies have detd. that TARC is up-regulated in the airways of human subjects with asthma and that CCR4- and CCR8-bearing T cells are also present in the airways of asthmatic subjects after allergen challenge. Mouse models of allergic airway inflammation have shown that neutralization of TARC can not only inhibit T-cell and eosinophil infiltration into the

lung

but can also inhibit bronchial hyperresponsiveness. The exact mechanism by which TARC can participate in allergic inflammation and what triggers the expression of TARC following allergen exposure is still unknown. Studies suggest that it could be involved not only in allergic asthma,

in the pathogenesis of allergic Th2-mediated diseases in general. REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS

**FORMAT** 

ANSWER 7 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:780964 CAPLUS

DOCUMENT NUMBER: 135:330487

Uses of interleukin 174 agonists and antagonists TITLE: Hurst, Stephen D.; Zurawski, Sandra M.; Rennick, INVENTOR(S):

Donna

Μ.

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE -----WO 2001079288 A2 20011025 WO 2001079288 A3 20020510 WO 2001-US12493 20010417

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2000-198488P P 20000418

Agonists or antagonists of the cytokine designated IL-174, and various methods of their use are provided. In particular, the methods make use of

facts that many activities of the IL-174 cytokine are described. agonists and antagonists may be used in therapy of many different types of

diseases and infections.

ANSWER 8 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:709559 CAPLUS

DOCUMENT NUMBER: 136:323434

TITLE: Chemoattractant Receptors Expressed on Type 2 T Cells

and Their Role in Disease

Cosmi, Lorenzo; Annunziato, Francesco; Maggi, Enrico; AUTHOR(S):

Romagnani, Sergio; Manetti, Roberto

Department of Internal Medicine, Section of Clinical CORPORATE SOURCE:

Immunology, Allergy and Respiratory Diseases,

University of Florence, Italy

SOURCE: International Archives of Allergy and Immunology

(2001), 125(4), 273-279 CODEN: IAAIEG; ISSN: 1018-2438

S. Karger AG PUBLISHER:

DOCUMENT TYPE: Journal; General Review

English LANGUAGE:

A review. The existence of two functionally distinguished populations among T cells has been established in both mice and humans. Type 1 T helper (Th1) cells are involved in the defense against intracellular bacteria and many viruses, while type 2 Th cells (Th2) are the major

actors in the response against parasites and play a central role in allergic inflammation. More recently, several data have suggested that some chemokine receptors are tightly regulated on T cells, and in accordance with this selective expression, Th1 and Th2 cells can be differentially recruited by specific chemokines to the inflammatory

Among Th2-assocd, chemokine receptors, CCR3, CCR4 and CCR8 have been described to play a central role in allergic inflammation. However, CCR3 is mainly expressed on basophils, eosinophils and mast cells, but it is poorly expressed by Th2 cells, and CCR4 is also expressed by Th subsets different from Th2 cells. So far, the chemoattractant receptors which among T cells appear to be selectively expressed by Th2 cells or their subsets are CCR8 and CRTH2. The ligand for CRTH2 is not a chemokine, but is prostaglandin (PG)D2, which is able to attract basophils, eosimophils, Th2 cells and type 2 cytotoxic (Tc2) CD8+T lymphocytes. The selective expression of CRTH2 on Th2 and Tc2 cells may be useful to develop new therapeutic strategies against allergic diseases and against other immune disorders. Addnl. studies, however, are required

to understand its effective importance in the induction and maintenance of

Th2- or Tc2-mediated response and inflammation.

REFERENCE COUNT:

THERE ARE 67 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

## FORMAT

L1 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2001:693651 CAPLUS

DOCUMENT NUMBER:

135:240908

TITLE:

Assay for agents that induce chemokinesis

INVENTOR(S):

Carson, Dennis A.; Leoni, Lorenzo M.; Cottam, Howard

В.

PATENT ASSIGNEE(S):

Regents of the University of California, USA

SOURCE:

PCT Int. Appl., 48 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT N	10.	KIND	DATE			. Al	PPLI	CATIO	N NC	o.	DATE			
WO 20010	069240	A1 20010920				WO 2001-US8581 20010316								
W:	AE, AG,	AL, AM	, AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO, CR,	CU, CZ	, DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
	HR, HU,	ID, IL	, IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
	LT, LU,	LV, MA	, MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,
	RU, SD,	SE, SG	, SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
	VN, YU,	ZA, ZW	, AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM			
RW:	GH, GM,	KE, LS	, MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
	DE, DK,	ES, FI	, FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
	BJ, CF,	CG, CI	, CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG		
US 20020	10125	A1	2002	0124		U:	S 20	01-8	1001	0	2001	0316		
PRIORITY APPLN. INFO.: US 2000-189976P P 20000316														
AB The pres	ent inv	ention	provi	des 1	neth	ods :	for	iden	tify:	ing	comp	ds.	that	can
induce c	ellular	chemok	inesi	s. i	Acco:	rdin	g to	the	pre	sent	inv	enti	on,	

AB The present invention provides methods for identifying compds. that can induce cellular chemokinesis. According to the present invention, chemokinesis interferes with immune and inflammatory responses by increasing cell movements and altering cell migration patterns.

Surprisingly, compds. isolated according to the present invention can

interfere with the spread of malignant cells through the body, reduce inflammatory responses and can cause leukocytes to be retained in lymph nodes, the spleen and other organs of the reticulo-endothelial system. Several methods are contemplated by the present invention for identifying compds. which can induce chemokinesis. In one embodiment the method involves contacting a population of target cells with a test compd. and observing whether the target cells produce a chemotactic mol.; wherein

the

target cell has a cognate receptor for the chemotactic mol. In another embodiment, the method involves contacting a population of target cells with a test compd. and observing whether the targets cells homotypically aggregate. In yet another embodiment, the method involves contacting a population of target cells with a test compd. and observing whether actin filaments in the target cells form stress fibers.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 10 OF 20 CAPLUS COPYRIGHT 2002 ACS

4

ACCESSION NUMBER: 2001:402803 CAPLUS

DOCUMENT NUMBER: 136:84180

Chemokines, chemokine receptors and allergy TITLE:

AUTHOR(S): Kaplan, Allen P.

Division of Pulmonary Diseases and Central Case CORPORATE SOURCE:

Medicine and Allergy and, Medical University of South

Carolina, Charleston, SC, USA

International Archives of Allergy and Immunology SOURCE:

(2001), 124(4), 423-431

CODEN: IAAIEG; ISSN: 1018-2438

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review. Chemokines are a group of cytokines that are responsible for the influx of blood cells, including T and B lymphocytes, monocytes, neutrophils, eosinophils and basophils, in allergic and other

inflammatory

conditions. They function as G protein-coupled chemotactic factors which also activate the cells with which they interact. Certain chemokines function within the afferent arm of the immune system, in which antigen

is

processed and antibody formation initiated, and others are active within the effector pathways of cellular immunity and late-phase allergic reactions. Th2 lymphocytes, which are crit. for allergy, employ the CC chemokine receptors CCR4 and CCR8 with the ligands thymus- and activation-regulated chemokine (TARC), macrophage-derived chemokine (MDC) and I-309, resp. The chemokine receptor CCR3 and ligands monocyte chemoattractant protein (MCP)-3, MCP-4, regulated upon activation

normal T cell expressed and secreted (RANTES) and eotaxins I and II are of

particular relevance for the recruitment and activation of eosinophils. Th1 reactions depend upon interferon .gamma.-induced CXC chemokines interferon-inducible protein (IP)-10, interferon-inducible T cell-.alpha. chemoattractant (iTAC) and monokine induced by interferon-.gamma. (MiG), which bind to chemokine receptor CXCR3.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 11 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:340634 CAPLUS 135:70896 DOCUMENT NUMBER: Inhibition of CCR4 ligands production by TITLE: oriental medicines Hirai, Koichi; Nakajima, Toshiharu; Cyong, Jong Chol AUTHOR(S): Dep. Bioregul. Funct., Univ. Tokyo, Grad. Sch. Med., CORPORATE SOURCE: Tokyo, Japan Kanpo to Men'eki, Arerugi (2000), 14, 121-129 SOURCE: CODEN: KMARED; ISSN: 0914-6407 PUBLISHER: Fama Intanashionaru DOCUMENT TYPE: Journal Japanese LANGUAGE: Allergic inflammation is a Th2-dominant immune reaction. Thymus- and activation-regulated chemokine (TARC) is a ligand specific to the receptor CCR4, which is preferentially expressed Th2, there by being supposed to participate in the development of allergic inflammation. TARC derived from respiratory epithelial cells play a closely connected part in the pathogenesis of airway allergy through chemoattraction of Th2 cells. This study uses respiratory epithelial cells to investigate the effect of oriental medical prepns. on TARC prodn. Large quantities (ng/mL order) of TARC were produced in the supernatant of cultures of A549 human respiratory epithelial cells co-stimulated by TNF-.alpha. and IL-4. Thirteen oriental prepns., including Ogon (Huang-Qin) and Oren (Huang-Lian), were shown to inhibit TARC prodn., with Mao (Ma-Huang) demonstrating esp. strong inhibition action. It inhibited accumulation of TARC mRNA indicating that Mao inhibits TARC prodn. at the level of transcription. Ephedrine and pseudoephedrine, major components of Mao, also inhibited TARC prodn. at the protein and mRNA levels. ANSWER 12 OF 20 CAPLUS COPYRIGHT 2002 ACS 2001:300895 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 134:279681 Process for producing polypeptide TITLE: Ogawa, Tatsuya; Konno, Yoshinobu; Akashi, Naohisa; INVENTOR(S): Takasugi, Hiroshi; Sugimoto, Seiji; Yano, Keiichi Kyowa Hakko Kogyo Co., Ltd., Japan PATENT ASSIGNEE(S): PCT Int. Appl., 41 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent. LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. -----\_\_\_\_\_ \_\_\_\_\_ WO 2001029246 A1 20010426 WO 2000-JP7288 20001019 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

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D 2001029246 Al 20010426 WO 2000-JP7288 20001019
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
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CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2000079504 A5 20010430 AU 2000-79504 20001019 EP 1229125 A1 20020807 EP 2000-969908 20001019

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL

PRIORITY APPLN. INFO.:

JP 1999-296267 A 19991019
WO 2000-JP7288 W 20001019

AB A process for producing a desired polypeptide by using rat cells. More particularly speaking, a process for producing the polypeptide which comprises culturing rat cells such as YB2/3HL.P2.G11.16Ag.20 (hereinafter referred to as YB2/0), preferably rat cells obtained by transferring a recombinant DNA contg. a DNA encoding the desired polypeptide such as an immunol. functional mol., in a serum-free medium. Among the desired polypeptides obtained by this method, an antibody obtained by, for example, using transformants of YB2/0 has a high antibody-dependent cytotoxic activity and thus is useful as drugs.

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

**FORMAT** 

L1 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:125162 CAPLUS

DOCUMENT NUMBER: 134:294296

TITLE: T cell phenotypes of the normal nasal mucosa:

induction of Th2 cytokines and CCR3 expression by

IL-4

AUTHOR(S): Till, Stephen J.; Jopling, Louise A.; Wachholz, Petra

A.; Robson, Rachel L.; Qin, Shixin; Andrew, David P.; Wu, Lijun; Van Neerven, Joost; Williams, Timothy J.;

Durham, Stephen R.; Sabroe, Ian

CORPORATE SOURCE: Upper Respiratory Medicine, National Heart and Lung

Institute Division, Biomedical Sciences Division, Imperial College School of Medicine, London, UK

SOURCE: Journal of Immunology (2001), 166(4), 2303-2310

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal LANGUAGE: English

AB Mucosal environments such as that of the nose are points of first contact between the human organism and its environment. At these sites the

system must be regulated to differentiate between and respond appropriately to pathogens and harmless contaminants. T cell-driven immune responses broadly fall into Th1- or Th2-type phenotypes, with increasing evidence that the recruitment of these T lymphocyte subsets is mediated by selective expression of specific chemokine receptors. We

have

immune

investigated the immunol. of the normal nasal mucosa. We show that nasal T cell lines from normal individuals, expanded by culture in IL-2, show reduced expression of the Th2-type cytokines IL-4 and IL-5 compared with lines derived from the blood of the same subjects. These T cells also show reduced expression of the Th2-selective chemokine receptor, CCR3,

but

are

similar levels of CCR4 compared with the blood-derived lines. This apparent suppression of Th2 cytokine and CCR3 expression by nasal T cells was reversed by addn. of IL-4 to the culture medium. These data

consistent with the presence of a nasal mucosal microenvironment that suppresses Th2 responses and may represent a protective measure against

atopic allergic disease in humans and a favoring of Th1 responses to infectious agents. In contrast, T cell expression of CCR1 was higher in the nose than in the blood regardless of the culture medium cytokine environment in keeping with a role for this receptor in tissue homing or lymphocyte activation.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L1 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:122695 CAPLUS

DOCUMENT NUMBER: 135:225348

TITLE: Chemokines and allergic diseases

AUTHOR(S): Adachi, Yuichi; Yamamoto, Junko; Miyawaki, Toshio CORPORATE SOURCE: School of Medicine, Department of Pediatrics, Toyama

Medical and Pharmaceutical University, Japan

SOURCE: Molecular Medicine (Tokyo) (2001), 38(2), 160-166

CODEN: MOLMEL; ISSN: 0918-6557

CODEN: MOLMEL; ISSN: 0918-

PUBLISHER: Nakayama Shoten

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review with 26 refs. on the role of eotaxin-CCR3 chemokines in the

aggregation of inflammatory cells in **allergies**, chemokines in **allergies**, and the movement of T cell subsets (CCR4-pos.

T cells, Th1 cells, Th2 cells) in allergies.

L1 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:100131 CAPLUS

DOCUMENT NUMBER: 134:251122

TITLE: Intervention of thymus and activation-regulated

chemokine attenuates the development of allergic

airway inflammation and hyperresponsiveness in mice
AUTHOR(S): Kawasaki, Shin; Takizawa, Hajime; Yoneyama, Hiroyuki;

Nakayama, Takashi; Fujisawa, Ryuichi; Izumizaki, Masahiko; Imai, Toshio; Yoshie, Osamu; Homma, Ikuo;

Yamamoto, Kazuhiko; Matsushima, Kouji

CORPORATE SOURCE: Department of Respiratory Medicine, Molecular

Preventive Medicine, School of Medicine, University

of

Tokyo, Tokyo, Japan

SOURCE: Journal of Immunology (2001), 166(3), 2055-2062

CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal LANGUAGE: English

AB Thymus- and activation-regulated chemokine (TARC; CCL17) is a lymphocyte-directed CC chemokine that specifically chemoattracts CC chemokine receptor 4-pos. (CCR4+) Th2 cells. To establish the pathophysiol. roles of TARC in vivo, we investigated here whether an mAb against TARC could inhibit the induction of asthmatic reaction in mice elicited by OVA. TARC was constitutively expressed in the lung and was up-regulated in allergic inflammation. The specific Ab against TARC attenuated OVA-induced airway eosinophilia and diminished the degree of airway hyperresponsiveness with a concomitant decrease in Th2 cytokine levels. Our results for the first time indicate that TARC is a pivotal chemokine for the development of Th2-dominated exptl. allergen-induced asthma with eosinophilia and AHR. This study also represents the first success in controlling Th2 cytokine prodn. in vivo by targeting a chemokine.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L1 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:903436 CAPLUS

DOCUMENT NUMBER: 2000:303430

TITLE: Non-redundant functional groups of chemokines operate

in a coordinate manner during the inflammatory

response in the lung

AUTHOR(S): Gutierrez-Ramos, J. -C.; Lloyd, C.; Kapsenberg, M.

L.;

model

Gonzalo, J. A.; Coyle, A. J.

CORPORATE SOURCE: Millennium Pharmaceuticals Inc, Cambridge, MA, 02139,

USA

SOURCE: Immunological Reviews (2000), 177, 31-42

CODEN: IMRED2; ISSN: 0105-2896

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 66 refs. The understanding of the relative contribution of particular chemokines to the selective accumulation of leukocyte subsets to an organ site during an inflammatory response is made difficult by the simultaneous presence of multiple chemokines with partially overlapping functions at the inflammatory site. The study of several chemokine pathways (expression and function) during the development of a mouse

of allergic airway disease (AAD) has revealed differential expression regulation with distinct cellular sources for individual chemokines with functional bias for the recruitment/localization of regulatory and/or effector leukocyte subsets. In the present review, we propose that distinct functional groups of chemokines cooperate to generate the complete inflammatory response in the lung during AAD. We will also extend these concepts to the specific recruitment of a key cellular subset

such as T helper type 2 (Th2) lymphocytes. We propose that the long term recruitment of antigen-specific Th2 cells to target organs, such as airways during chronic lung inflammation, is the result the sequential involvement of several chemotactic axes. Specifically, the CCR3/eotaxin and the CCR4/MDC pathway act in a coordinated cooperative manner, with the CCR3/eotaxin pathway being crit. in the acute/early stages of a response, followed by the CCR4/MDC pathway, which ultimately dominates in the recruitment of antigen-specific Th2 cells. Other chemokines/receptors participate in this process possibly by amplifying/priming the Th2 recruitment response.

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L1 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:756484 CAPLUS

DOCUMENT NUMBER: 133:329593

TITLE: Low adenosine anti-sense oligonucleotide,

compositions, kit and method for treatment of airway disorders associated with bronchoconstriction, lung

inflammation, allergy(ies) and surfactant

depletion

INVENTOR(S): Nyce, Jonathan W.

PATENT ASSIGNEE(S): East Carolina University, USA

SOURCE: PCT Int. Appl., 1592 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND DATE
                                        APPLICATION NO. DATE
    PATENT NO.
                                         ______
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    WO 2000062736 A2 20001026
WO 2000062736 A3 20011011
                                         WO 2000-US8020 20000324
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
            KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
            MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
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            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    BR 2000006019 A 20010313 BR 2000-6019 20000324 EP 1168919 A2 20020109 EP 2000-919668 20000324
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                       US 1999-127958P P 19990406
                                       WO 2000-US8020 W 20000324
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OTHER SOURCE(S): MARPAT 133:329593

AB An in vivo method of selectively delivering a nucleic acid to a target gene or mRNA, comprises the topical administration, e.g. to the respiratory system, of a subject of a therapeutic amt. of an oligonucleotide (oligo) that is antisense to the initiation codon region, the coding region, the 5' or 3' intron-exon junctions or regions within 2 to 10 nucleotides of the junctions of the gene or antisense to a mRNA complementary to the gene in an amt. effective to reach the target polynucleotide and reducing or inhibiting expression. In addn. a method of treating an adenosine-mediated effect comprises topically administering

to a subject an antisense oligo in an amt. effective to treat the respiratory, pulmonary, or airway disease. In order to minimize triggering adenosine receptors by their metab., the administered oligos have a low content of or are essentially free of adenosine. A pharmaceutical compn. and formulations comprise the oligo antisense to an adenosine receptor, genes and mRNAs encoding them, genomic and mRNA flanking regions, intron and exon borders and all regulatory and functionally related segments of the genes and mRNAs encoding the polypeptides, their salts and mixts. Various formulations contain a requisite carrier, and optionally other additives and biol. active agents.

The low-adenosine or adenosine-free (des-A) agent for practicing the method of the invention may be prepd. by selecting a target gene(s), genomic flanking region(s), RNA(s) and/or polypeptide(s) assocd. with a disease(s) or condition(s) afflicting lung airways, obtaining the sequence

of the mRNA(s) corresponding to the target gene(s) and/or genomic flanking

region(s), and/or RNAs encoding the target polypeptide(s), selecting at least one segment of the mRNA which may be up to 60 % free of thymidine (T) and synthesizing one or more anti-sense oligonucleotide(s) to the mRNA

segments which are free of adenosine (A) by substituting a universal base for A when present in the oligonucleotide. The agent may be prepd. by selection of target nucleic acid sequences with GC running stretches, which have low T content, and by optionally replacing A in the antisense oligonucleotides with a "Universal or alternative base". The agent, compn. and formulations are used for prophylactic, preventive and therapeutic treatment of ailments assocd. with impaired respiration, lung allergy (ies) and/or inflammation and depletion lung surfactant or surfactant hypoprodn., such as pulmonary vasoconstriction, inflammation, allergies, allergic rhinitis, asthma, impeded respiration, lung pain, cystic fibrosis, bronchoconstriction. The present treatment is suitable for administration in combination with other treatments, e.g. before, during and after other treatments, including radiation, chemotherapy, antibody therapy and surgery, among others. Alternatively, the present agent is effectively administered prophylactically or therapeutically by itself for conditions without known therapies or as a substitute for therapies exhibiting undesirable side effects. The treatment of this invention may be administered directly into the respiratory system of a subject so that the agent has direct access to

the

lungs, or by other effective routes of administration, e.g. topically, transdermally, by implantation, etc., in an amt. effective to reduce or inhibit the symptoms of the ailment.

L1 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:628006 CAPLUS

DOCUMENT NUMBER:

133:217723

TITLE:

Method for validating/invalidating target(s) and

pathways

INVENTOR(S):

Nyce, Jonathan W.

PATENT ASSIGNEE(S):

Epigenesis Pharmaceuticals, Inc., USA

SOURCE:

PCT Int. Appl., 53 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

4 COLDIN 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
       PATENT NO.
                                KIND DATE
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                                           20000908
                                                                  WO 2000-US5643
       WO 2000051621
                                  A1
                                                                                           20000302

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

                    DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
                    CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
       BR 2000009247
                                           20011120
                                                                BR 2000-9247
                                                                                              20000302
                                   Α
                                           20020102
                                                                   EP 2000-913730
                                                                                              20000302
       EP 1165093
                                   Α1
                   AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                    IE, SI, LT, LV, FI, RO
                                           20021112
                                                                   JP 2000-602288
                                                                                              20000302
       JP 2002537792
                                   T2
PRIORITY APPLN. INFO.:
                                                               US 1999-122950P P
                                                                                              19990305
                                                               WO 2000-US5643
                                                                                         W 20000302
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OTHER SOURCE(S): MARPAT 133:217723

AB A method of detg. the existence of a correlation between a function of a disease or condition and a gene or mRNA encoding a target polypeptide

suspected of being assocd. with a disease or condition, comprises obtaining oligonucleotides (oligos) consisting of up to about 15 % adenosine (A), preferably having no adenosine content, and which is anti-sense to a target selected from the group consisting of target genes and their corresponding mRNAs, genomic and mRNA flanking regions selected from the group consisting of 3' and 5' intron-exon borders and the juxta-section between coding and non-coding regions, and all mRNA segments

encoding polypeptides assocd. with a pre-selected disease or condition; selecting amongst the oligos one that significantly inhibits or ablates expression of the polypeptide encoded by the mRNA upon in vitro hybridization to the target mRNA; administering to a subject an amt. of the selected oligo effective for in vivo hybridization to the target

mRNA;

and assessing a subject's function that is assocd. with the disease or condition before and after administration of the oligo; wherein a change in the function's value greater than about 70% indicates a pos. correlation, between about 40 and about 70% a possible correlation, and below about 30% a lack of correlation. The present method preferably administers the oligos in situ where the target is located, e.g. into the subject's respiration when validating targets assocd. With malignant and other pulmonary and respiratory functions, so that the agent has direct access to the lungs. Alternatively, such desAdenosine oligos may be delivered directly to the CNS or other organs, tissues and organ systems, by known delivery formulations. This invention provides a rapid,

reliable

method for drug target validation/invalidation in various biol. systems that utilize proprietary low or desAdenosine antisense oligonucleotides. Using desAdenosine antisense oligonucleotides, the present method may validate/invalidate potential gene targets with a level of speed and accuracy that has heretofore been impossible using traditional techniques.

The use of antisense oligonucleotides to target adenosine receptors is described. Adenosine A1 receptor antisense oligonucleotides had bronchodilator activity in rabbits and adenosine A3 receptor antisense oligonucleotides had anti-inflammatory activity in asthmatic rabbits.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L1 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2002 ACS

3

ACCESSION NUMBER:

1999:223049 CAPLUS

DOCUMENT NUMBER:

130:251233

TITLE:

SOURCE:

Macrophage-derived chemokine (MDC), MDC analogs, MDC

inhibitor substances, and their therapeutic

applications

INVENTOR(S):

Gray, Patrick W.; Chantry, David H.; Deeley, Michael

C.; Raport, Carol J.; Godiska, Ronald

PATENT ASSIGNEE(S):

Icos Corporation, USA PCT Int. Appl., 159 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915666	A2	19990401	WO 1998-US20270	19980928
WO 9915666	A3	19990916		

SOURCE: Integnational Archives of Allergy and Immunology

((2001), 124(4), 423-431

CODEN: IAAIEG; ISSN: 1018-2438

PUBLISHER: S. Karger AG

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Chemokines are a group of cytokines that are responsible for the influx of blood cells, including T and B lymphocytes, monocytes,

neutrophils, eosinophils and basophils, in allergic and other

inflammatory

conditions. They function as G protein-coupled chemotactic factors which also activate the cells with which they interact. Certain chemokines function within the afferent arm of the immune system, in which antigen

is

processed and antibody formation initiated, and others are active within the effector pathways of cellular immunity and late-phase allergic reactions. Th2 lymphocytes, which are crit. for **allergy**, employ the CC chemokine receptors CCR4 and CCR8 with the ligands thymus- and activation-regulated chemokine (TARC), macrophage-derived chemokine (MDC) and I-309, resp. The chemokine receptor CCR3 and ligands monocyte chemoattractant protein (MCP)-3, MCP-4, regulated upon

activation
normal T cell expressed and secreted (RANTES) and eotaxins I and II are
of

particular relevance for the recruitment and activation of eosinophils. Th1 reactions depend upon interferon .gamma.-induced CXC chemokines interferon-inducible protein (IP)-10, interferon-inducible T cell-.alpha. chemoattractant (iTAC) and monokine induced by interferon-.gamma. (MiG), which bind to chemokine receptor CXCR3.

REFERENCE COUNT:

THERE ARE 57 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L2 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS

57

ACCESSION NUMBER: 2001:296102 CAPLUS

DOCUMENT NUMBER: 135:75647

TITLE: Stem cell factor and IgE-stimulated murine mast cells

produce chemokines (CCL2, CCL17, CCL22) and express

chemokine receptors

AUTHOR(S): Oliveira, S. H. P.; Lukacs, N. W.

CORPORATE SOURCE: University of Michigan Medical School - Department of

Pathology, Ann Arbor, MI, 48109-0602, USA

SOURCE: Inflammation Research (2001), 50(3), 168-174

CODEN: INREFB; ISSN: 1023-3830

PUBLISHER: Birkhaeuser Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AB Objective and design: In the present study we investigated the effect of SCF and/or IgE on histamine, TNF-.alpha. and chemokines released from

marrow-derived mast cells (BMMC) as well as chemokine receptor expression.

Material and methods: BMMC were derived from femoral bone marrow of CBA/J mice. The purity of BMMC was >98% after 3 wk. BMMC (2.5 .times. 106 cells/well) were incubated in the presence or absence of either SCF, IgE plus DNP or a combination of SCF and IgE for 6 and 18 h. Cell-free supernatants were recovered to measure CC chemokines, TNF-.alpha. and histamine release utilizing ELISA assays. CC chemokine family receptors were detected by RT-PCR anal., and confirmed using functional chemotactic

assays. Results: Histamine levels were comparable between SCF and IgE stimulated cells, whereas TNF-.alpha. prodn. was significantly greater after IgE compared to SCF stimulation. SCF and/or IgE-stimulated BMMC released CC chemokines, CCL22 (MDC), CCL17 (TARC) and CCL2 (MCP-1). Increased mRNA expression of CCR1, CCR2, CCR3, and CCR5 was detected in SCF and IqE-stimulated BMMCs. Functional chemotactic assays confirmed the expression data. Conclusion: SCF and IqE can up-regulate the expression of chemokines and chemokine receptors on mast cells.

SCF may play a significant role in their activation and inflammation during allergic responses.

REFERENCE COUNT:

THERE ARE 55 CITED REFERENCES AVAILABLE FOR

THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2000:903436 CAPLUS

DOCUMENT NUMBER:

135:120758

TITLE:

Non-redundant functional groups of chemokines operate

in a coordinate manner during the inflammatory

response in the lung

AUTHOR(S):

Gutierrez-Ramos, J. -C.; Lloyd, C.; Kapsenberg, M.

L.;

Gonzalo, J. A.; Coyle, A. J.

CORPORATE SOURCE:

Millennium Pharmaceuticals Inc, Cambridge, MA, 02139,

English

SOURCE:

Immunological Reviews (2000), 177, 31-42

CODEN: IMRED2; ISSN: 0105-2896

PUBLISHER:

Munksgaard International Publishers Ltd.

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

A review with 66 refs. The understanding of the relative contribution of particular chemokines to the selective accumulation of leukocyte subsets to an organ site during an inflammatory response is made difficult by the simultaneous presence of multiple chemokines with partially overlapping functions at the inflammatory site. The study of several chemokine pathways (expression and function) during the development of a mouse model

of allergic airway disease (AAD) has revealed differential expression regulation with distinct cellular sources for individual chemokines with functional bias for the recruitment/localization of regulatory and/or effector leukocyte subsets. In the present review, we propose that distinct functional groups of chemokines cooperate to generate the complete inflammatory response in the lung during AAD. We will also extend these concepts to the specific recruitment of a key cellular subset

such as T helper type 2 (Th2) lymphocytes. We propose that the long term recruitment of antigen-specific Th2 cells to target organs, such as airways during chronic lung inflammation, is the result the sequential involvement of several chemotactic axes. Specifically, the CCR3/eotaxin and the CCR4/MDC pathway act in a coordinated cooperative manner, with the CCR3/eotaxin pathway being crit. in the acute/early stages of a response, followed by the CCR4/MDC pathway, which ultimately dominates in the recruitment of antigen-specific Th2 cells. Other chemokines/receptors participate in this process possibly by amplifying/priming the Th2 recruitment response. 66

REFERENCE COUNT:

THERE ARE 66 CITED REFERENCES AVAILABLE FOR

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RECORD. ALL CITATIONS AVAILABLE IN THE RE

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ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
1.2
                        2000:68155 CAPLUS
ACCESSION NUMBER:
                        132:106969
DOCUMENT NUMBER:
                        Chemokines as adjuvants of immune response
TITLE:
                        Caux, Christophe; Vanbervliet, Beatrice; Lebecque,
INVENTOR(S):
                        Serge; Vicari, Alain; Dieu, Marie-Caroline
                        Schering-Plough, Fr.
PATENT ASSIGNEE(S):
                        Eur. Pat. Appl., 16 pp.
SOURCE:
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                        APPLICATION NO. DATE
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                    A1 20000126 EP 1998-401799 19980716
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                                         WO 1999-US14148 19990715
     WO 2000003728
                     A1 20000127
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                       EP 1998-401799 A 19980716
                                       WO 1999-US14148 W 19990715
                                       US 2001-768917 A 20010124
     Dendritic cells play a crit. role in antigen-specific immune responses.
AB
     Materials and methods are provided for treating disease states, including
     cancer and autoimmune disease, by facilitating or inhibiting the
migration
     or activation of antigen-presenting dendritic cells. In particular,
     chemokines are used to initiate, amplify or modulate an immune response.
     In one embodiment, chemokines are used to attract dendritic cells to the
     site of antigen delivery. An increase no. of dendritic at the site of
     antigen delivery means more antigen uptake and a modified immune
response.
REFERENCE COUNT:
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT
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L2 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:796268 CAPLUS